

**POWELL COUNTY REPORT  
OF  
ENDANGERED, THREATENED, AND SPECIAL CONCERN  
PLANTS, ANIMALS, AND NATURAL COMMUNITIES  
OF  
KENTUCKY**

**KENTUCKY STATE NATURE  
PRESERVES COMMISSION  
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# Kentucky State Nature Preserves Commission

## Key for County List Report

Within a county, elements are arranged first by taxonomic complexity (plants first, natural communities last), and second by scientific name. A key to status, ranks, and count data fields follows.

### STATUS

KSNPC: Kentucky State Nature Preserves Commission status:

N or blank = none    E = endangered    T = threatened    S = special concern    H = historic    X = extirpated

USESA: U.S. Fish and Wildlife Service status:

blank = none    C = candidate    LT = listed as threatened    LE = listed as endangered

SOMC = Species of Management Concern

### RANKS

GRANK: Estimate of element abundance on a global scale:

G1 = Critically imperiled

GU = Unrankable

G2 = Imperiled

G#? = Inexact rank (e.g. G2?)

G3 = Vulnerable

G#Q = Questionable taxonomy

G4 = Apparently secure

G#T# = Intraspecific taxa (Subspecies and variety abundances are coded with a 'T' suffix; the 'G' portion of the rank then refers to the entire species)

G5 = Secure

GH = Historic, possibly extinct

GNR = Unranked

GX = Presumed extinct

GNA = Not applicable

SRANK: Estimate of element abundance in Kentucky:

S1 = Critically imperiled

SU = Unrankable

S2 = Imperiled

S#? = Inexact rank (e.g. G2?)

S3 = Vulnerable

S#Q = Questionable taxonomy

S4 = Apparently secure

S#T# = Intraspecific taxa

S5 = Secure

SNR = Unranked

SH = Historic, possibly extirpated

SNA = Not applicable

SX = Presumed extirpated

Migratory species may have separate ranks for different population segments (e.g. S1B, S2N, S4M):

S#B = Rank of breeding population

S#N = Rank of non-breeding population

S#M = Rank of transient population

### COUNT DATA FIELDS

# OF OCCURRENCES: Number of occurrences of a particular element from a county. Column headings are as follows:

E - currently reported from the county

H - reported from the county but not seen for at least 20 years

F - reported from county & cannot be relocated but for which further inventory is needed

X - known to be extirpated from the county

U - reported from a county but cannot be mapped to a quadrangle or exact location.

The data from which the county report is generated is continually updated. The date on which the report was created is in the report footer. Contact KSNPC for a current copy of the report.

Please note that the quantity and quality of data collected by the Kentucky Natural Heritage Program are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Kentucky have never been thoroughly surveyed, and new species of plants and animals are still being discovered. For these reasons, the Kentucky Natural Heritage Program cannot provide a definitive statement on the presence, absence, or condition of biological elements in any part of Kentucky. Heritage reports summarize the existing information known to the Kentucky Natural Heritage Program at the time of the request regarding the biological elements or locations in question. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

KSNPC appreciates the submission of any endangered species data for Kentucky from field observations. For information on data reporting or other data services provided by KSNPC, please contact the Data Manager at:

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County	Taxonomic Group	Scientific name	Common name	Statuses	Ranks	# of Occurrences				
						E	H	F	X	U
Powell	Vascular Plants	<i>Acer spicatum</i>	Mountain Maple	E /	G5 / S1S2	0	0	0	1	0
		Cool, moist, mesic woods. often associated with cool air drainages from caves, or at high elevations; periglacial boulderfields (Weakley 1998).								
Powell	Vascular Plants	<i>Calopogon tuberosus</i>	Grass Pink	E /	G5 / S1	0	1	0	1	0
		Sphagnous bogs, fens, savannas and wet shores; in KY, dry sandy pine (-oak) woods and swamps..								
Powell	Vascular Plants	<i>Cypripedium parviflorum</i>	Small Yellow Lady's-slipper	T /	G5 / S2	3	0	0	1	0
		Bogs, mossy swamps and woods, wet shores; in KY, rich mesic forested slopes.								
Powell	Vascular Plants	<i>Lilium philadelphicum</i>	Wood Lily	T /	G5 / S2S3	0	0	1	0	0
		Openings in seasonally moist forests, prairies and roadsides.								
Powell	Vascular Plants	<i>Liparis loeselii</i>	Loesel's Twayblade	T /	G5 / S2S3	2	0	0	0	0
		Bogs, peaty meadows, and damp or seeping thickets or mesic slopes; Has been found on abandoned strip mines (R. Thompson).								
Powell	Vascular Plants	<i>Monotropsis odorata</i>	Sweet Pinesap	T / SOMC	G3 / S2	3	1	1	1	0
		Sandstone ridgetops, chiefly pine woods but also mesophytic woods.								
Powell	Vascular Plants	<i>Najas gracillima</i>	Thread-like Naiad	S /	G5? / S2S3	1	0	0	0	0
		MUDDY, PEATY, OR SANDY PONDS, POOLS, OR SHORES.								
Powell	Vascular Plants	<i>Paxistima canbyi</i>	Canby's Mountain-lover	T / SOMC	G2 / S2	1	0	0	0	0
		Calcareous rocks and slopes (generally near the top of cliffs or bluffs), rocky woods in the mountains, usually above major streams.								
Powell	Vascular Plants	<i>Platanthera psycodes</i>	Small Purple-fringed Orchid	E /	G5 / S1	0	0	1	0	0
		Wet meadows, damp thickets, alluvial or springy shores, low woods, wet roadsides.								
Powell	Vascular Plants	<i>Poa saltuensis</i>	Drooping Bluegrass	E /	G5 / S1S2	0	1	0	0	0
		Dry or rocky woods; also, northern hardwood forests, barrens and glades (Weakley 1998).								
Powell	Vascular Plants	<i>Polygala cruciata</i>	Crossleaf Milkwort	E /	G5 / S1	1	1	0	0	0
		Wet pinelands, savannas, peats, and sands on or near the coastal plain; in KY, swamps, bogs, edge of lowland woods.								
Powell	Vascular Plants	<i>Prosartes maculata</i>	Nodding Mandarin	S /	G3G4 / S3?	2	0	0	0	0
		Rich mountain woods (Gleason & Cronquist 1991). In KY, rare and local in rich mesophytic forests (Medley 1993). Typical of "mesic forest" formation. Typical of transition from C to E ( or both), where C = Typical of moderate base-status and fertility, and E = Typical of extremely acid, infertile soils (J. Campbell, globally rare plants in the Interior Low Plateau).								
Powell	Vascular Plants	<i>Rhynchospora recognita</i>	Globe Beaked-rush	S /	G5? / S3	0	1	0	0	0
		SWAMPS, BOGS, AND OPEN WET SOIL.								
Powell	Vascular Plants	<i>Sabatia campanulata</i>	Slender Marsh Pink	E /	G5 / S1	1	1	0	0	0
		Salt or brackish marshes, deep sands and peat. also pinelands, swamps, and meadows.								
Powell	Vascular Plants	<i>Silene ovata</i>	Ovate Catchfly	E / SOMC	G3 / S1	1	0	0	0	0
		Dry - mesic forest, mountain summits. In IL found in calcareous sandstone woods, exposures on the side of slopes below a cap of sandstone.								
Powell	Vascular Plants	<i>Solidago albopilosa</i>	White-haired Goldenrod	T / LT	G2 / S2	22	0	0	2	0
		Sandstone rockhouses and ledges along cliffines.								
Powell	Vascular Plants	<i>Spiranthes lucida</i>	Shining Ladies'-tresses	T /	G5 / S2S3	0	0	1	0	0
		Bottomland hardwood forests and other wet forests as well as wet grassy openings.								
Powell	Vascular Plants	<i>Viburnum rafinesquianum</i> var. <i>rafinesquianum</i>	Downy Arrowwood	T /	G5T4T5 / S2	1	0	0	0	0
		Dry, esp. calcareous woods.								

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Powell	Freshwater Mussels	<i>Alasmidonta marginata</i>	Elktoe	T / SOMC	G4 / S2	1	0	0	0	0
		Occurs in large to medium size streams but more typical of smaller streams (Buchanan 1980, Goodrich and Van Der Schalie 1944, Oesch 1984, Parmalee 1967, Wilson and Clark 1914). Sometimes found in lakes connected to rivers. Parmalee (1967) reported the preferred habitat to be small streams with good current sand or gravel bottoms, and depth of several inches to two feet. Buchanan (1980) found this species to be common in gravel and cobble substrate in 2 to 18 inches of water, Neel and Allen (1964) found this species to be more abundant in the mainstream Cumberland River than in small streams.								
Powell	Freshwater Mussels	<i>Cyprogenia stegaria</i>	Fanshell	E / LE	G1 / S1	0	1	0	0	0
		MEDIUM TO LARGE STREAMS AND RIVERS WITH MODERATE TO STRONG CURRENT IN COARSE SAND AND GRAVEL AND DEPTH RANGING FROM SHALLOW TO DEEP ( GOODRICH AND VAN DER SCHALIE 1944, NEEL AND ALLEN 1964, PARMALEE 1967, JOHNSON 1980, GORDON AND LAYZER 1989).								
Powell	Freshwater Mussels	<i>Epioblasma triquetra</i>	Snuffbox	E / SOMC	G3 / S1	5	0	0	0	0
		Occurs in medium-sized streams to large rivers generally on mud, rocky, gravel, or sand substrates in flowing water (Baker 1928, Buchanan 1980, Johnson 1978, Murray and Leonard 1962, Parmalee 1967). Often deeply buried in substrate and overlooked by collectors.								
Powell	Freshwater Mussels	<i>Simpsonaias ambigua</i>	Salamander Mussel	T / SOMC	G3 / S2S3	2	0	0	0	0
		OFTEN FOUND BURIED IN SUBSTRATE SUCH AS SOFT MUD AND/OR GRAVEL, AND/OR UNDER FLAT STONES IN SHALLOW WATER IN SMALL STREAMS WHERE THE CURRENT MAY BE SWIFT (BAKER 1928, BUCHANAN 1980, GOODRICH AND VAN DER SCHALIE 1944).								
Powell	Freshwater Mussels	<i>Villosa lienosa</i>	Little Spectaclecase	S /	G5 / S3S4	0	0	1	1	0
		INHABITS SMALL TO MEDIUM-SIZED RIVERS, USUALLY IN SHALLOW WATER ON A SAND/MUD/DETRITUS BOTTOM (PARMALEE 1967, GORDON AND LAYZER 1989).								
Powell	Insects	<i>Dryobius sexnotatus</i>	Sixbanded Longhorn Beetle	T / SOMC	GNR / S1					
		Appears to be dependent on climax hardwood forest habitat, where it principally lives on sugar maple and, to a lesser extent, beech and elm (Perry et al. 1974, Schweitzer 1989). Mid June to mid July is when adults are typically found (Mike Bratton, pers comm).								
Powell	Insects	<i>Manophylax butleri</i>	A Limnephilid Caddisfly	S /	G2 / S2	4	0	0	0	0
		In Kentucky, it is only known along the Pottsville Escarpment of the Cumberland Plateau from rock walls composed of Pennsylvanian age sandstone of the Lee Formation and the Corbin Member, and at elevations ranging from 244-366 m. In general the walls are moist to the touch year round and are usually completely enclosed by vegetation (usually very dense growth of Rhododendron), and consequently relative humidity around the wall is usually greater than 80% (Schuster 1993).								
Powell	Insects	<i>Ophiogomphus mainensis</i>	Maine Snaketail	E /	G4 / S1	0	1	0	0	0
		CLEAR, MODERATELY RAPID ROCKY STREAMS AND RIVERS IN FOREST, OFTEN WHERE THEY DRAIN LAKES OR SWAMPS (DUNKLE 2000).								
Powell	Fishes	<i>Ichthyomyzon fossor</i>	Northern Brook Lamprey	T /	G4 / S2	8	0	0	0	0
		SMALL TO MEDIUM-SIZE UPLAND STREAMS WHERE ADULTS LIVE IN SAND-GRAVEL BOTTOMS OF CLEAN RIFFLES AND RACEWAYS (BURR AND WARREN 1986, PAGE AND BURR 1991). AMMOCOETES REQUIRE MIXED SAND, SILT, AND DEBRIS IN QUIET WATER.								
Powell	Fishes	<i>Lampetra appendix</i>	American Brook Lamprey	T /	G4 / S2	5	0	0	0	0
		Raceways, riffles, and flowing margins of permanently flowing streams and rivers with gravel, sand and sediment bottoms (Burr and Warren 1986). Ammocoetes live in sand and sediment of pools and backwaters.								
Powell	Amphibians	<i>Cryptobranchus alleganiensis alleganiensis</i>	Eastern Hellbender	S / SOMC	G3G4T3T4 / S3	1	0	0	0	0
		CONFINED TO RUNNING WATERS OF FAIRLY LARGE STREAMS AND RIVERS.								
Powell	Reptiles	<i>Elaphe guttata guttata</i>	Corn Snake	S /	G5T5 / S3	8	2	0	0	1
		The species is found in virtually all upland situations including prairie, fields, woods, and around settlements and buildings, especially cornfields (Wright and Wright 1957). Apparently they do not occur in bottomlands since these are not included in any references. In KY, the species has been found everywhere from woodlands to cultivated fields, preferring woodland edge and overgrown fence rows. The species often burrows under cover and can be found occasionally under logs, rocks, debris, etc.								
Powell	Reptiles	<i>Eumeces anthracinus</i>	Coal Skink	T /	G5 / S2	0	1	0	0	0
		The habitat generally consists of humid wooded areas with abundant leaf litter and loose rocks; often the lizard occurs in the vicinity of springs, swamps, and bogs, but it also inhabits clearcuts, highway and powerline rights-of-way (Hulse et al. 2001), rocky bluffs above creek valleys, dry, rocky, south-facing hillsides (Johnson 2000), and dry shale barrens (West Virginia). Individuals often shelter under logs and rocks near water. Sometimes they take refuge in water. One nest was under a piece of shale (Mount 1975).								
Powell	Reptiles	<i>Eumeces inexpectatus</i>	Southeastern Five-lined Skink	S /	G5 / S3	0	0	0	0	1
		OPEN WOODLANDS, EDGES.								

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Powell	Breeding Birds	<i>Cistothorus platensis</i>	Sedge Wren	S /	G5 / S3B	1	0	0	0	0
		Grasslands and savanna, especially where wet or boggy, sedge marshes, locally in dry cultivated grainfields. In migration and winter also in brushy grasslands. (B83COM01NA)								
Powell	Mammals	<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	S / SOMC	G3G4 / S3	13	1	0	0	0
		Rafinesque's big-eared bats use a variety of sites for roosting including caves, protected sites along cliffhines, old mine portals, abandoned tunnels, cisterns, old or seldom used buildings, etc. Apparently less frequently use tree cavities.								
Powell	Mammals	<i>Corynorhinus townsendii virginianus</i>	Virginia Big-eared Bat	E / LE	G4T2 / S1	9	0	0	0	0
		THE VIRGINIA BIG-EARED BAT IS A CAVE-DWELLING SPECIES THAT HAS BEEN SELDOM REPORTED ANYWHERE BUT IN A CAVE. THE SPECIES WILL USE SMALL ROCKHOUSES AND OTHER PROTECTED SITES ALONG CLIFFLINES, ESPECIALLY FOR SUMMER ROOSTING AND MATERNITY SITES.								
Powell	Mammals	<i>Myotis leibii</i>	Eastern Small-footed Myotis	T / SOMC	G3 / S2	1	0	0	0	0
		Lieb's bats use a variety of habitats. They occur in caves, mines, protected sites along cliffhines, abandoned buildings, and are occasionally found roosting under rocks on the ground or on the floors of caves. Summer habitat is currently unknown, but may be similar sites.								
Powell	Mammals	<i>Myotis sodalis</i>	Indiana Bat	E / LE	G2 / S1S2	3	0	0	0	0
		Indiana bats use primarily caves for hibernacula, although they are occasionally found in old mine portals.								
Powell	Mammals	<i>Spilogale putorius</i>	Eastern Spotted Skunk	S /	G5 / S2S3	4	0	0	0	0
		WOODED AREAS, ESPECIALLY ALONG CLIFFLINES. WILL USE ABANDONED BUILDINGS.								
Powell	Mammals	<i>Ursus americanus</i>	American Black Bear	S /	G5 / S2	1	0	0	0	0
		LARGELY FORESTED AREAS.								
Powell	Communities	<i>Appalachian mesophytic forest</i>		/	GNR / S5	1	0	0	0	0